#5

Sheet 1 of 1

M PTO-1449 U.S. DEPARTMENT OF COMMERCE Codified) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.	APPLN. NO.
5437.06	09/862,652
APPLICANT:	
Doherty et al.	
FILING DATE	GROUP
May 21, 2001	- 2632 5/52

U.S. PATENT DOCUMENTS

EXAMINER	PATENT	ISSUE				FILING DATE IF
INITIAL	NUMBER	DATE	PATENTEE	CLASS	SUBCLASS	APPROPRIATE
506	US-4,577,781	03/25/1986	Braun		1	
	US-4,690,553	09/01/1987	Fukamizu et al.			
	US-4,700,223	10/13/1987	Shoutaro et al.			
	US-4,733,760	03/29/1988	Inagaki et al.			
	US-5,652,522	07/29/1997	Kates et al.			
	US-5,796,344	08/18/1998	Mann et al.			
	US-			 		
	US-					
	US-				D 2	
	US-	-			MEC	Elven
	US-				JANO	EIVED 8 2003 enter 2600
	US-				Ten	8 2003
	US-				Technology C	Pote
	US-					2600
						

EXAMINER INITIAL	PUBLICATION NUMBER	PUB. DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	<u>,</u>					

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT	CUMENT APPLICATION		1		TRANSLA	TION
	NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO ·
502	2,618,543	07-1987	France			X	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED 1/1/4/157
The second secon	- (1)/-(10)
EXAMINER: Initial if citation considered, whether or not citation is in conformance w	ith MPEP 609; Draw line through citation if not in conformance
and not considered. Include copy of this form with next communication to applicant.	· ·
and not considered. The date copy of this form with next communication to applicant.	والمنافقة المنافقة ا





FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO. 5437.06	APPLN. NO. 09/862,652
APPLICANT: John A. Doherty et al.	,
FILING DATE	GROUP
21 May 2001	2632

SP 21 MADENTAL

U.S. PATENT DOCUMENTS

EXAMINER	PATENT	ISSUE		<u> </u>	T	FILING DATE IF
INITIAL	NUMBER	DATE	PATENTEE	CLASS	SUBCLASS	APPROPRIATE
<u>.</u>						
			_			
	, .		<u> </u>		RECEIV	ED
					OCT 0 3 2	
				Te	chnology Cen	er 2600
	-					
	 					,
						
	 				<u> </u>	
	 · · · · · · · · · · · · · · · · · · ·					
		<u> </u>				

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT	PUBLISHED				TRANSL	ATION
	NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SS	Viking '79 Rover Study Final Report, Vol. I, Summary, Vol. II, Detailed Technical Volume, NASA CR-132417, Martin Marietta Corporation, March 1974.
EXAMINER	DATE CONSIDERED (1/14/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet 1 of 1

100	PORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
010	(Modified) PATENT AND TRADEMARK OFFICE
FEB 2 1 2	INFORMATION DISCLOSURE
(3)	(Use several sheets if necessary)

ATTY. DOCKET NO. 5437.06	APPLN. NO. 09/862,652
APPLICANT: Doherty et al.	
FILING DATE May 21, 2001	GROUP 3752

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
856	US-6,354,786	03/12/2002	Feller	<u> </u>		
	US-					
	US-					2
	US-		****			A CA
	US-				(%)	ARCEIVE CONTRACTOR
	US-				~	80 8 . C
	US-	, <u>-</u>				Con 10,
	US-					783
	US-					TO TO
-		. , .				
					<u> </u>	
			<u> </u>			

EXAMINER INITIAL	PUBLICATION NUMBER	PUB. DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

Γ		DOCUMENT	APPLICATION				TRANSLA	TION
-		NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
ſ	·			- *-				
_	 				L			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

					/
EXAMINE	R	1-11-	DATE CONSIDERED	11/14/	03
EXAMINE	R: Initia	l if citation considered, whether or not citation is in conformance wit	th MPEP 609; Draw line thi	rough citatio	if not in conformance
and not con	cidorad	Include conv of this form with next communication to applicant			

		5.000.1
FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	APPLN. NO.
(Modified) PATENT AND TRADEMARK OFFICE	5437.06	09/862,652
INFORMATION DISCLOSURE	APPLICANT:	
STATEMENT BY APPLICANT	Doherty et al.	
(Use several sheets if necessary)	FILING DATE	GROUP
2 2009 2	May 21, 2001	2632 3752

U.S. PATENT DOCUMENTS

PATENT NUMBER	ISSUE DATE	DATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		TATEMIE	CLASS	SUBCLASS	
08-				•	
			-		
				PECE	
				NEUE	IVED
				KAA.	
				W/ ir ÷	6 2003
			 	Toobnolom	
				recimology C	enter 2600
					<u>-</u>
	-				
				<u> </u>	<u> </u>
					
		 			
			_		
	·		+		<u> </u>
	PATENT NUMBER US-	NUMBER DATE	NUMBER DATE PATENTEE	NUMBER DATE PATENTEE CLASS US-	NUMBER DATE PATENTEE CLASS SUBCLASS

EXAMINER INITIAL	PUBLICATION NUMBER	PUB. DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

DOCUMENT	APPLICATION				TRANSLA	TION
NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

700	Article, "Just Drive!," by Allen Zeyher, Roads & Bridges, April 2002	
EXAMINER	12/10	DATE CONSIDERED ///4/33
EXAMINER: Initia	if citation considered, whether or not citation is in conformance wit	th MPEP 609; Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

#3

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE

(Nothfiel) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE

SEA TEMENT BY APPLICANT

(Use several sheets if necessary)

(Use several sheets if necessary)

FILING DATE May 21, 2001

GROUP Not Yet Assigned

3752

U.S. PATENT DOCUMENTS

EXAMINER		PATENT	ISSUE				FILING DATE II
INITIAL		NUMBER	DATE	PATENTEE	CLASS	SUBCLASS	APPROPRIATE
507		3,160,964	12/1964	Boyer, et al. /	239	684	
507-		3,519,169	07/1970	Holland	222	626	Δ.
		* 3,540,655	11/1970	Hinrichs	239	75	
		* 3,655,130	04/1972	Patrick	239	77	OF COME, COO
		* 3,856,206	12/1974	Bell, et al.	239	75 C.S	Ca Va
		3,891,979	- 06/1975	Braun, et al. 🗶	340	581	
507-		3,995,569	12/1976	Picardat	239	656x	VC Op.
376-		4,052,003	10/1977	Steffen ×	239	71	Chr.
~		* 4,084,748	04/1978	Anderson, et al.	239	74	- CO
	_	* 4,176,791	12/1979	Cattaneo, et al.	239	76	- 0
	_	* 4,209,065	06/1980	Ledent	166	64	
		* 4,210,284	07/1980	Tarnay, et al.	239	75	
55-	-	4,274,091	06/1981	Decker /	340	905	
27	\dashv	4,442,979	04/1984	Kupper	239	656	
232	 -	4,491,275	01/1985	Holsworth ~	239	687x	· .
500 500	$\overline{}$	4,492,952	01/1985	Miller	340	52 F	
<u>e</u>		* 4.503,806	03/1985	Prusak, et al.	118	712	
	F	* 4,523,280	06/1985	Bachman	364	424	
		* 4,529,336	07/1985	Shinozaki et al.	-406	14	
<u></u>	===	4,588,127	05/1986	Ehrat V	239	662x	
S07-		4,678,056	07/1987	Kobari, et ál.	180	247	
S \$2		* 4,768,716	09/1988	Buchanan, Jr., et al.	239	284.1	<u> </u>
		* 4,684,062	08/1987	Bagwell	239	204.1	
	\Rightarrow	* 4,803,626	02/1989	Bachman et al	364	424.07	
.10.		*4,809,197	02/1989	Tashiro et al.	364	550	
····		*4,984,163	01/1991	Kuwana et al.	364	426.02	
					239		
		* 5,012,977	05/1991	Karklins, et al.		284.1	
		* 5,028,017	07/1991	Simmons, et al.	244	134C	
977-		5,069,392	12/1991	Wise, et al.	239	675	
SEL	\perp	5,096,125	03/1992	Wise, et al.	239	675	
55Z		5,186,396	02/1993	Wise, et al.	239	675	
557_		5,267,696	12/1993	Balmer	239	662	
507		5,310,113	05/1994	Cowgur	239	69x	
507-		5,318,226	06/1994	Kime, et al.	239	687x	
		+5,366,039	T1/1994	Sawada	180	197	
555		5,416,476	05/1995	Rendon	340	905	
557~		5,447,272	09/1995	Ask 🗸	239	7	
		*5,449,049	09/1995	Every	180	197	
500-		5,515,623	05/1996	Weeks	239	289x	
57-		5,521,594	05/1996	Fukushima	340	905	
Ser		5,619,193	04/1997	Doherty, et al.	340	905	
EL		5,653,389	08/1997	Henderson, et al.	239	172x	
57	-	5,699,056	12/1997	Yoshida X	340	905	
205		5,745,051	04/1998	Doherty, et al.	340	905	
		5,774,070	06/1998	Rendon V	340	905	
500-		5,904,296	05/1999	Doherty, et al.	239	663x	



U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATRAT	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
THA .	* 5,928,504	- 07/1999 -	Hembre, et al.	218	-88	
500-	5,931,393	08/1999	Alsip, et al.	239	677x	
	* 5,947,391	09/1999	Beck et al.	239	677	A .
	* 5,957,621	- 09/1999	Clark, Jr. et al.	404	111	2 3
	* 6,092,745	07/2000	Seymour et al.	239	675	
	* 6,173,904	01/2001	Doherty et al.	239	1	an o les

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT	PUBLISHED				TRANSLA	TION
١٠	NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	* 2;060,418	08/1993	Canada				
	* 2,233,689	04/1997	Canada				
							<u> </u>

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

955-		Advertisement, Root Snow Plows
		Mobile GPS Builds on 7400 Technology to Claim the Future of Pavement Management, FactsFinder
		Advertisement, Henderson Manufacturing Reversible Plow
		Advertisement, Henderson Manufacturing Patrol Wing
		Advertisement, Tenco Side Wings
		Advertisement, Tenco Reversible Plow
		Surveyors Use Pedal Power to Map City, ENR, November 13, 1995
		Trimble, AEC Automation Newsletter, September 1995
		GPS Satellites, Trimble Precise Positioning Systems
		GPS Goes Real Time, Civil Engineering, September 1994
		Advertisement, VIBRO-METER SA, Fribourg, Switzerland
		SCAN FP 2000 Sensor Advertisement, Surface Systems Inc.
SOV		Data Sheet D251, AANDERAA INSTRUMENTS, March 1995
SOL		UCRL-MI-120916, Lawrence Livermore National Laboratory, June 7, 1995
		Article, "Calibration to Automation," Road & Bridges, June 1999
506		Block diagram from Iowa Department of Transportation presentation, August 11, 1999
		* Advertisement, COMPU-SPREADTM "Introducing our On board Liquid Pre-Wetting System. C.I.S. – SERIES," Appears to be available as early as April 1997
-		* GL 400 Spreader Control Presentation, Component Technology, Appears to be available as early as March 15, 2001
		* White Paper, "Ice! Alert," Appears to be available as early as 1998
		"SaltMiser™ Operating Instructions," December 8, 1997
	 	* Marketing Document, DIDACTICS Incorporated, "Why SaltMiser?," pages 1, 3, and 5 of 6 available
		* Marketing Document, DIDACTICS Incorporated, "Saltmiser™ 2.0 A Real Time Salt Application Controller," October 25, 1997
		* Marketing Document, DIDACTICS Incorporated, "IR Applications for Ice and Snow Control," pages 335-362 available, Appears to be available as early as May 12, 1998
		* Brochure, Enator Telub AB, "Mobile Road Condition Monitoring," Appears to be available as early as 1998
		* Article, "Better bridge deicing on the way?" Better Roads, June 1995
		* Advertisement, Passport 5000, "Only Passport 5000 Gives You the Total Picture." 1995
		* Article "Roads Report," edited by Larry Flynn, Roads & Bridges, March 1993
		* Afficle, "Americans can Learn a Lot from European, Japanese Snowfighters," by Leland D. Smithson, R.E., Roads & Bridges, pages 30-32 available, June 1995
		* Article, "Developments Improve Road Weather Information Systems," Betters Roads, pages 21 and 24 available, October 1995

Sheet 3 of 3 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Draft Proposal, Policy Recommendations to the RAQC Concerning the Comprehensive Long Range Air Quality Plan, from the Street Sanding/Cleaning Subcommittee City of Aurora Public Works Dept. (Colorado), November 1, 1995 Article, "RWIS helps with snow and ice control," Better Roads, September 1994 Brochure, Tell Temp 750, Geneva Scientific, October 1994 Brochure, "Artificial Intelligence/Expert Systems," Kaman Sciences Corporation, Copyright 1991 "Traffic Sensor System," Better Roads, December 1995 The View From Space Satellites keep eye on earthly activity," USA Today * Article, "Riding the Data Highway," Newsweek, Page 97, March 21, 1994 * Picture diagram, "One-Second Emissions Test," Denver Post, May 7, 1995 Article, "Colorado Hosts Pilot Workshop Pavement Preventive Maintenance: An Idea Whose Time Has Come," Focus, US Department of Transportation Federal Highway Administration, August 1995 * Article, "Innovations to ITS," ITE Journal, December 1996 Geographic Information System Tailored for Emergency Management Applications," Kaman Sciences Brochure, "KEMS ... A Corporation Article, "Measuring Salt's Effectiveness in New York," Better Roads, January 1995 * Excerpts from America Online: KKlean, June 30, 1995 * Article, "Clementine Searches for Ice on Moon," by Jane E. Allen, Sunday Camera, April 17, 1994 * Article, entitled "Cellular technology has new niche, Phones offer probile control in rural Colorado," by Dinah Zeiger, Denver Post, August 21, 1994 Article, "Columbia/HCA system speeds test result delivery," USA Today, November 11, 1994 Article, "Danger - Black Ice!" Traffic Technology International, 1994 * Article, "New Horizons at Harris," by Bernie Ward, Sky, December 1994 * Kaman Annual Report, 1993 Article, "Humidity and Pressure Measurement," Vaisa * Kaman, A Technology Company, Fact Book, 1993 * Article, "The Snow on Pluto," by Jeffrey Winters/Discover, January 1997 * Article, "Water, Pure and Simple," by Ashok Gadgil, Discover, pages 87-88, July 1996 * Article, "One Very Cold Lake," by Kathleen Spiessbach, Discover, page 26, January 1997 * Article, "Perpetual Flight," by Kathy A. Syftil, Discover, page 38, November 1996 * Advertisement, Cole-Parmer Instrument Company, re: Cole-Parmer Law-Cost Infrared Thermometers, 1997 Brochure, Southwest Research Institute – Guide, 13 pages, August 1996 Brochure, Southwest Research Institute - Guide, 13 pages, January 1998 Brochure, "Facts About Southwest Research Institute," Southwest Research Institute, San Antonio, Texas * Annual Report from Southwest Research Institute, 1996 Annual Report from Southwest Research Institute, 1997 * Feedback on article, "Managing Winter Weather" and "Visibility a Key Component of Weather Systems," by John D. Crosby, December 1996 * Article, "Ordinary Vinegar Found Among Stars," by Paul Recer * Brochure, "Solving Today's Problems for Tomorrow's Safety," Control Products, Inc. * Advertisement "Are You Still Detecting Icy Roads Between Pavement Sensors by the Seat of Your Pants?" Vaisala Brochure, "Better Roads... Safer Roads... More Cost Effective Roads... Through Innovations to Technology," Federal Highway Administration Sensors to Help State Keep Ahead of Storms," by Ed Vogel Article, " * Brochyre, "Autoscope," Econolite Control Products, Inc. Brochure, "Playing with Fire - Science and Politics of Air Pollution from Cars' Article, "Out Front - What's Happening in the World of ITS" Article, "New Auto Technology Helps Guide Drivers, Avoid Crashes," by Earle Eldridge, USA Today Advertisement, "Hand-Held Autoranging Conductivity Meters'

EXAMINER DATE CONSIDERED 11/14/53

Instruction Manual from Coralba ad, Sweden, "Instructions for C-u Friction Tester"

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.